

SECTION A-A **ROUND COLUMN**

Minimum inside diameter of steel casing = $1\frac{1}{2}$ " greater than nominal column diameter for Class F and $2\frac{1}{2}$ " for Class P/F

-PCC column

Backing plate

-Elliptical casing

SECTION B-B ROUND COLUMN

-PCC column

Grout

∖\Backing plate.

Gap: 2 in. min,

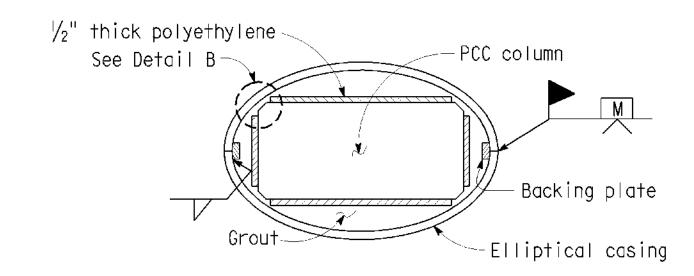
4 in. max

Limits of polyethylene

to be shown on plans.

F.G. -~

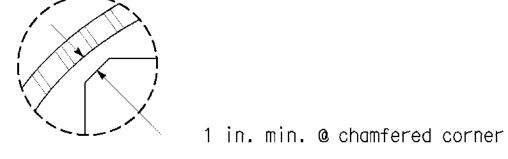
Minimum inside diameter of steel casing = $2\frac{1}{2}$ " greater than nominal column diameter for Class P/F.



SECTION B-B

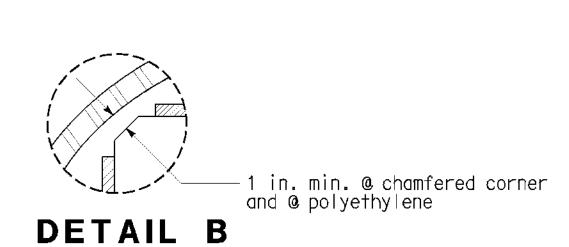
RECTANGULAR COLUMN

SECTION A-A RECTANGULAR COLUMN



DETAIL A

See Detail A



Opening reinforcement shall be the same thickness as the steel casing up to maximum ! Inner face of steel casing Drain or utility opening. See Note 8 30

Outer face of steel casing

-Steel casing

-Welded joint.

See Detail C

 $\frac{1}{2}$ " thick polyethylene

CLASS P/F COLUMN

Polyethylene shall be

continuous when X is

greater than or equal

to 2 in. See Note 6.

D = Pipe extension outside diameter

Water tight all-around SECTION X-X

USERNAME -> rwu

CASING OPENING

Note: Opening reinforcement required for drain or utility openings larger than 4 in.

KILOMETER POST SHEET TOTAL TOTAL PROJECT NO. SHEETS DIST. COUNTY REGISTERED ENGINEER - CIVIL

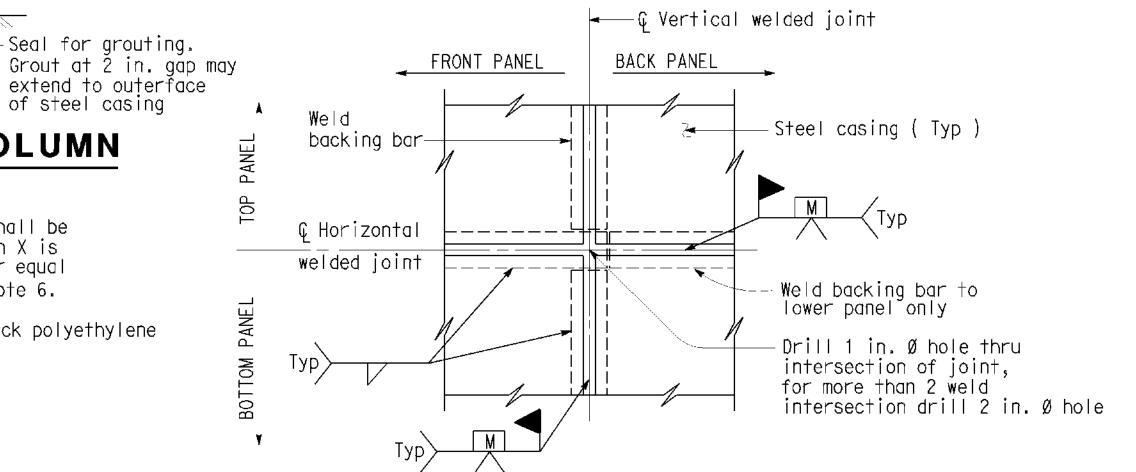
PLANS APPROVAL DATE

The State of California or its officers or agent shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

ELLIPTICAL CASING DETAIL CLASS F AND P/F COLUMN

Point of compound curve-

Radii R1 and R2 to be determined by the Contractor subject to the approval of the Engineer



-C.C.

(TWO WELDED INTERSECTION JOINT)

DETAIL C

NOTES:

- 1) For varying thickness steel casing inside surface to remain flush. Minimum clearance from PCC column to casing shall be maintained.
- 2) Appropriate injection nozzles to be provided on casing, but removed and ground flush following complétion of grouting opération.
- 3) All voids between steel casing and polyethylene (Class P/F), and steel casing and PCC column (Class F) to be filled with grout.
- 4) Location and number of vertical and horizontal welds to be determined by the Contractor, and subject to the approval of the Engineer. The location of casing welds are for illustration. No skip welds allowed.
- 5) Circular steel casing to be 1/4" thick minimum for casings with a 4'-4" diameter or less; all other steel casings to be 3/8" thick unless noted differently on contract plans. Backing plates to be the same thickness as casing up to maximum $\frac{1}{2}$ " thick.
- 6) Contractor shall remove 12 in. polyethylene strip behind backing plate if backing plate is closer than $1\frac{1}{2}$ " from polyethylene.
- 7) Waterproof limits for steel casings. Typical for Classe "F" and "P/F".
- 8) For pipe extensions, opening shall be no more than $\frac{1}{4}$ " greater than the pipe extension diameter. For other openings, the opening diameter to be determined by the Engineer.

NO SCALE

STANDARD DRAWING BRIDGE NO. STATE OF STEEL COLUMN CASINGS DIVISION OF BRIAN MARONEY R.J. ZELINSKI RELEASE 12-04-06 CALIFORNIA CHECKED PAT HIPLEY **ENGINEERING SERVICES** LOMETER POST FTAILS R. YEE SEISMIC RETROFIT xs7-010 DEPARTMENT OF TRANSPORTATION R.J. ZELINSKI 8/93 ORIGINAL SCALE IN INCHES FOR REDUCED PLANS STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 10/25/05) CU DISREGARD PRINTS BEARING EARLIER REVISION DATES _ EΑ

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